

CLAIMS

1. A transparent positive electrode for gallium nitride-based compound semiconductor light-emitting devices, comprising a contact metal layer in contact with
5 a p-type semiconductor layer, a current diffusing layer on the contact metal layer, the current diffusing layer having an electrical conductivity larger than that of the contact metal layer, and a bonding pad layer on the current diffusing layer.
- 10 2. The transparent positive electrode according to claim 1, wherein the contact metal layer is a platinum group metal or an alloy containing a platinum group metal.
- 15 3. The transparent positive electrode according to claim 2, wherein the contact metal layer is platinum.
4. The transparent positive electrode according to any one of claims 1 to 3, wherein the thickness of the contact metal layer is from 0.1 to 7.5 nm.
- 20 5. The transparent positive electrode according to claim 4, wherein the thickness of the contact metal layer is from 0.1 to 5 nm.
6. The transparent positive electrode according to claim 5, wherein the thickness of the contact metal layer is from 0.5 to 2.5 nm.
- 25 7. The transparent positive electrode according to any one of claims 1 to 6, wherein the current diffusing layer is a metal selected from the group consisting of gold, silver and copper, or an alloy containing at least one member of gold, silver and copper.
- 30 8. The transparent positive electrode according to claim 7, wherein the current diffusing layer is gold.
9. The transparent positive electrode according to any one of claims 1 to 8, wherein the thickness of the current diffusing layer is from 1 to 20 nm.
- 35 10. The transparent positive electrode according to claim 9, wherein the thickness of the current diffusing layer is from 1 to 10 nm.

11. The transparent positive electrode according to claim 10, wherein the thickness of the current diffusing layer is from 3 to 6 nm.

5 12. A gallium nitride-based compound semiconductor light-emitting device comprising the transparent positive electrode according to any one of claim 1 to 11.